IN THE ABSTRACT

Please amend the Abstract as follows.

A vector tree correlator correlates over received ~~samples of~~ data spread at differing spreading rates or~~, equivalently, over the received samples~~ over differing lengths of spreading sequence. When the maximum length sequence has a length N that is an integer power of 2, or 2^M, then the vector tree correlator is formed from M levels. Level (1) is formed of add/subtract logic units, and Level (2) through Level (M) are formed of adders. Add/subtract logic units each receive a pair of received signal samples and combines the received signal samples based on a control signal input. The control signal input is derived from the locally generated spreading sequence. ~~Adders of each level combine corresponding pairs of output values from the previous level. The outputs of the lower level are paired sequentially, for example, from left to right to form "groups" that may be traced downward through the tree to the corresponding received samples input to the add/subtract logic units. For example, if the correlation by vector tree correlator is over a length 64 spreading sequence, the spreading rate N is 64 corresponding to M=6 levels. For this spreading rate of N=64, 32 add/subtract logic units are present at Level (1), 16 adders at Level (2), 8 on the next higher level and so on until at level (6) a single, 2-input adder performs the last combination of the tree.~~ The output of the adder at the top of the tree is the result of the length ~~64~~ N correlation, while ~~. The vector tree correlator defines~~ output tap points at different levels of the tree ~~for different groups. Each tap point~~ each provides a correlation for one of the different spreading rates of length 2^m, $1 < m < M$~~, that are less than the maximum spreading rate~~. ~~The length of the tap corresponds to the spreading rate of the correlated sequence of length 2^m.~~